

Comprehensive General Permit for Discharges to Surface Water and Groundwater

Issuance Date: TBD
Effective Date: TBD
Expiration Date: TBD

Water Permitting and Enforcement Division
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Comprehensive General Permit for Discharges to Surface Water and Groundwater

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Comprehensive General Permit for Discharges to Surface Water and Groundwater

Section 1. Authority

This general permit is issued under the authority of section 22a-430b of the General Statutes.

Section 2. Definitions

The definitions of terms used in this general permit shall be the same as the definitions contained in section 22a-423 of the General Statutes and section 22a-430-3(a) of the Regulations of Connecticut State Agencies. Additional definitions associated with this general permit are included in Appendix A.

Section 3. Authorization under This General Permit

(a) *Eligible Activities*

This general permit authorizes the discharge of the following wastewaters (as defined in this general permit) to a surface water or groundwater:

- Non-contact cooling or geothermal heat pump water
- Water treatment wastewater
- Hydrostatic pressure testing of natural gas and petroleum tanks and pipelines wastewater
- Potable water system draining of tanks and pipelines wastewater
- Fire suppression testing wastewater
- Hydrant flushing wastewater
- Boiler blowdown wastewater (to groundwater only).

(b) *Requirements for Authorization*

This general permit authorizes the activities listed in Section 3(a) of this general permit provided:

- (1) Such activity is in compliance with the registration requirements of Section 4 of this general permit.
- (2) Such wastewater is discharged to either a surface water and/or to groundwater in accordance with Table 3-1 of this general permit:

Table 3-1—Authorized Discharge Locations for Various Wastewater Categories

Category of Discharge	Groundwater Class	Surface Water Class	Lakes, Reservoirs
Noncontact Cooling or Geothermal Heat Pump Water	All (if no treatment chemicals added)	AA, A, SA (if no treatment chemicals added) B, SB (if treatment chemicals added) (Receiving stream must have minimum 10:1 dilution at 7Q10 for AA, A, and B waters, and 10:1 dilution at low tide for SA and SB waters)	Not Authorized
Water Treatment Wastewater	All	All	Reservoirs
Hydrostatic Pressure Testing of Natural Gas and Petroleum Tanks/Pipelines Wastewater	Not Authorized	A, SA, B, SB (if erosion control BMPs used) (Receiving stream must have minimum 10:1 dilution at ambient flow)	Not Authorized
Potable Water System Draining of Tanks/Pipelines Wastewater	All (if erosion control BMPs used)	All (if dechlorination and erosion control BMPs used) (Receiving stream must have minimum 10:1 dilution at ambient flow)	All (if dechlorination and erosion control BMPs used)
Fire Suppression	All (if erosion control BMPs used)	All (if dechlorination and erosion control BMPs used)	All (if dechlorination and erosion control BMPs used)
Hydrant Flushing	All (if erosion control BMPs used)	All (if dechlorination and erosion control BMPs used)	All (if dechlorination and erosion control BMPs used)
Boiler Blowdown	All (if no treatment chemicals added)	Not Authorized	Not Authorized

(3) Coastal Area Management and Permitting

Such activity is consistent with all-applicable goals and policies in section 22a-92 of the General Statutes, and will not cause adverse impacts to coastal resources as defined in section 22a-93 of the General Statutes or if such activity is located, wholly or in part, waterward of the coastal jurisdiction line in tidal, coastal or navigable waters of the State or in tidal wetlands, the activity is authorized pursuant to sections 22a-359 through 22a-363f, inclusive, or 22a-28 through 22a-35, inclusive.

(4) Endangered and Threatened Species

Such activity does not threaten the continued existence of any species listed pursuant to section 26-306 of the General Statutes as endangered or threatened and will not result in the destruction or adverse modification of habitat designated as essential to such species.

(5) Aquifer Protection

Such activity, if it is located within an aquifer protection area as mapped under section 22a-354b of the General Statutes, complies with regulations adopted pursuant to section 22a-354i of the General Statutes.

(6) Conservation and Preservation Restrictions

Such activity, if located within a conservation or preservation restriction area, complies with section 47-42d of the Connecticut General Statutes, by providing the following documentation to the commissioner: proof of written notice to the holder of such restriction of the proposed activity's registration pursuant to this general permit or a letter from the holder of such restriction verifying that the proposed activity is in compliance with the terms of the restriction.

(7) Wild and Scenic Rivers Act

Such activity must be consistent with the Wild and Scenic Rivers Act (16 U.S.C. 1271-1287) for those river components and tributaries which have been designated as Wild and Scenic by the United States Congress. Further, such activity must not have a direct and adverse effect on the values for which such river designation was established.

(8) Antidegradation Standards

Such activity is consistent with the Antidegradation Standards of section 22a-426-8 of the Regulations of Connecticut State Agencies.

(9) Water Diversion Policy Act

Such activity is consistent with the Water Diversion Policy Act which requires that any person or municipality maintaining a diversion at a rate exceeding 50,000 gallons in any twenty- four hour period shall:

- (A) have in effect a valid license issued by the commissioner pursuant to sections 22a-368 or 22a-378a of the General Statutes, or
- (B) be exempt pursuant to section 22a-377(b)-1(a) of the Regulations of Connecticut State Agencies

(10) New Discharges to Impaired Waters or Waters with Total Maximum Daily Loads

Except for discharges which occur no more than once every three months and are of a duration not longer than 48 hours, a new discharge is not authorized to an impaired water listed in the most recent Connecticut Integrated Water Quality Report of waters listed pursuant to Clean Water Act section 303(d) and 305(b) unless the permittee provides to the commissioner the following documentation to support a showing that the discharge is not expected to cause or contribute to an exceedance of a water quality standard:

- (A) For discharges of pollutants which cause or contribute to the impairment of a water body segment without an established Total Maximum Daily Load (TMDL), the permittee must provide data and other technical information to the commissioner sufficient to demonstrate that the discharge of the pollutant identified as an indicator of the impairment will meet in-stream water quality criteria at the point of discharge to the waterbody.

For discharges to waterbody segments impaired for Aquatic Life Uses, discharges shall not contain concentrations of any pollutants with a Water Quality Criteria (WQC) identified in Table 3 of section 22a-426-9 of the Regulations of Connecticut State Agencies in concentrations greater than the more restrictive of the chronic aquatic life criteria or applicable human health criteria.

- (B) For discharges to waters with an established Total Maximum Daily Load (TMDL), the commissioner must determine that there are sufficient remaining Waste Load Allocations in the TMDL to allow the discharge and that existing dischargers to the waterbody are subject to compliance schedules designed to bring the waterbody into attainment with water quality standards.

To be eligible for authorization under this subsection, the registrant must receive a written determination from the commissioner that the discharge will not contribute to the existing impairment.

(11) Existing Discharges to Impaired Waters

For previously authorized discharges to impaired waterbody segments or other sensitive areas, the commissioner may require additional control measures or may require authorization under an individual permit pursuant to Sections 4(g) (Action by Commissioner) and 3(g)(Issuance of an Individual Permit) of this general permit.

(12) Certifications by a Qualified Professional

As required by Section 4(c)(2)(Q) of this general permit, the registrant has submitted to the commissioner a written certification which, at a minimum, complies with the following requirements:

- (A) such certification was signed by a Qualified Professional as defined in this general permit;
- (B) such certification is not the subject of an audit as described under section 22a-430b of the Connecticut General Statutes;
- (C) the Qualified Professional signing the certification has, at a minimum, completely and thoroughly reviewed this general permit and the following regarding the discharges to be authorized under this general permit: (i) all registration information provided in accordance with Section 4(c)(2) of this general permit, (ii) the facility, based on a site inspection, (iii) compliance records, (iv) all wastewater collection and treatment systems and monitoring equipment, including any plans and specifications, operating records and any Department approvals regarding such wastewater collection and treatment systems and monitoring equipment;
- (D) the Qualified Professional signing the certification has made an affirmative determination, based on the review described in Section 3(b)(12)(C) of this general permit, that any treatment or Best Management Practices are adequate to assure that the activity to be authorized under this general permit will comply with the terms and conditions of such general permit and all wastewater collection and treatment systems and monitoring equipment: (i) have been designed and installed to control pollution to the maximum extent achievable using measures that are technologically available and economically practicable, (ii) will function properly as designed based on visual inspection, compliance and operating records, and (iii) are adequate

to ensure compliance with the terms and conditions of this general permit;

(E) such Qualified Professional certifies, provided it is true and accurate, to the following statement: "I hereby certify that I am a Qualified Professional as defined in the Comprehensive General Permit for Discharges to Surface and Ground Waters and as further specified in Section 3(b)(12) of such permit. I am making this certification in connection with a registration under such general permit, submitted to the commissioner by [INSERT NAME OF REGISTRANT] for an activity located at [INSERT ADDRESS OF PROJECT OR ACTIVITY]. I have personally examined and am familiar with the information that provides the basis for this certification, including but not limited to all information described in Section 3(b)(12)(C) of such general permit, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such information, that the information upon which this certification is based is true, accurate and complete to the best of my knowledge and belief. I further certify that I have made the affirmative determination required in accordance with Section 3(b)(12)(D) of this general permit and that my signing this certification constitutes conclusive evidence of my having made such affirmative determination. I understand that this certification may be subject to an audit by the commissioner in accordance with Section 22a-430b of the Connecticut General Statutes, and I agree to cooperate with the commissioner should such an audit be required, including, but not limited to providing information as may be requested in writing by the commissioner in connection with any such audit. I also understand that knowingly making any false statement in this certification may be punishable as a criminal offense, including the possibility of fine and imprisonment, under section 53a-157b of the Connecticut General Statutes and any other applicable law."

(13) Certification Requirements for Registrants and other Individuals

As part of the registration for this general permit, the registrant and any other individual or individuals responsible for preparing the registration submits to the commissioner a written certification which, at a minimum, complies with the following requirements:

(A) the registrant and any other individual or individuals responsible for preparing the registration and signing the certification has completely and thoroughly reviewed, at a minimum, this general permit and the following regarding the activities to be covered under such general permit: (i) all registration information provided in

accordance with Section 4(c)(2) of such general permit, (ii) the facility, based on a visual site inspection, (iii) compliance records, (iii) all wastewater collection and treatment systems and monitoring equipment, including any plans and specifications, operating records and any Department approvals regarding such wastewater collection and treatment systems and monitoring equipment;

- (B) the registrant has, based on the review described in section 3(b)(13)(A) of this general permit, made an affirmative determination to: (i) comply with the terms and conditions of this general permit; (ii) maintain compliance with all plans and documents prepared pursuant to this general permit, and (iii) properly operate and maintain all wastewater collection and treatment systems and monitoring equipment in compliance with the terms and conditions of this general permit to protect the waters of the state from pollution;
- (C) such registrant certifies to the following statement: "I hereby certify that I am making this certification in connection with a registration under such general permit, submitted to the commissioner by [INSERT NAME OF REGISTRANT] for an activity located at [INSERT ADDRESS OF PROJECT OR ACTIVITY] and that such activity is eligible for authorization under such permit. I certify that the registration filed pursuant to this general permit is on complete and accurate forms as prescribed by the commissioner without alteration of their text. I certify that I have personally examined and am familiar with the information that provides the basis for this certification, including but not limited to all information described in Section 3(b)(13)(A) of such general permit, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such information, that the information upon which this certification is based is true, accurate and complete to the best of my knowledge and belief. I further certify that I have made the affirmative determination required in accordance with Section 3(b)(13)(B) of this general permit and that my signing this certification constitutes conclusive evidence of my having made such affirmative determination.

I certify that our facility does not use products or chemicals that may result in a discharge of mercury.

I understand that the registration filed in connection with such general permit may be denied, revoked or suspended for engaging in professional misconduct, including but not limited to the submission of false or misleading information, or making a false or inaccurate certification. I understand that the certification made pursuant to

Section 3(b)(8) of this general permit may be subject to an audit by the commissioner in accordance with section 22a-430b of the Connecticut General Statutes, and that I will be required to provide additional information as may be requested in writing by the commissioner in connection with such audit, and the registration filed in connection with such general permit may be denied, revoked or suspended as a result of such audit. As part of such audit, I understand the commissioner may require that any information prepared in accordance with this general permit be independently certified by a Professional Engineer in accordance with this general permit and that such independent certification shall be at the registrant's expense. I understand that the reasonable cost of any such audit that reveals that a false certification was submitted to the commissioner may be charged to the registrant for this general permit for which such certification was made. I also understand that knowingly making any false statement in the submitted information and in this certification may be punishable as a criminal offense, including the possibility of fine and imprisonment, under section 53a-157b of the Connecticut General Statutes and any other applicable law.”

- (D) any other individual or individuals responsible for preparing the registration certifies to the following statement: “I hereby certify that I am making this certification in connection with a registration under such general permit, submitted to the commissioner by [INSERT NAME OF REGISTRANT] for an activity located at [INSERT ADDRESS OF PROJECT OR ACTIVITY] and that such activity is eligible for authorization under such permit. I certify that the registration filed pursuant to this general permit is on complete and accurate forms as prescribed by the commissioner without alteration of their text. I certify that I have personally examined and am familiar with the information that provides the basis for this certification, including but not limited to all information described in Section 3(b)(13)(A) of such general permit, and I certify, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining such information, that the information upon which this certification is based is true, accurate and complete to the best of my knowledge and belief. I understand that the registration filed in connection with such general permit may be denied, revoked or suspended for engaging in professional misconduct, including but not limited to the submission of false or misleading information, or making a false or inaccurate certification. I understand that knowingly making any false statement in the submitted information and in this certification may be punishable as a criminal offense, including the possibility of fine and imprisonment, under section 53a-157b of the Connecticut General Statutes and any other

applicable law.”

(c) *Geographic Area*

This general permit applies throughout the State of Connecticut.

(d) *Effective Date and Expiration Date of this General Permit*

This general permit is effective on the date it is issued by the commissioner and expires five (5) years from such date of issuance.

(e) *Effective Date of Authorization*

(1) For those persons not required to submit a registration, pursuant to Section 4(a)(1) of this general permit, the effective date of authorization under this general permit is the same as the effective date of the general permit or the date the subject discharge is initiated, whichever is later.

(2) For those persons required to submit a registration, pursuant to Section 4(b)(1) of this general permit, the effective date of authorization under this general permit is the date a registration which meets the requirements of Section 4 of this general permit is received by the commissioner.

(3) (A) For new facilities required to submit a registration *and* receive approval of authorization from the commissioner, pursuant to Section 4(a) of this general permit, the effective date of authorization of this general permit is the date the commissioner issues a written approval of registration.

(B) For facilities previously permitted by an individual permit, an activity is authorized by this general permit on the 1st day of the month following the date of the approval of registration. The Permittee shall continue to comply with the terms and conditions of the previously issued permit until the date such activity is authorized by this general permit.

(f) *Transition to and from an Individual Permit*

No person shall operate or conduct an activity authorized by both an individual permit and this general permit. The requirements for transitioning authorization are as follows:

(1) *Transition from an Individual Permit to Authorization under this General Permit.* If an activity meets the requirements of authorization of this general permit and such operation or activity is presently authorized by an individual permit, the permittee may seek a modification to the

permit to exclude such operation or activity from the individual permit or if the operation or activity is the sole operation or activity authorized by such permit, the permittee shall surrender its permit in writing to the commissioner. In either event, such permittee's individual permit shall continue to apply and remain in effect until authorization of such operation or activity under this general permit takes effect.

- (2) *Transition from Authorization under this General Permit to an Individual Permit.* If an activity or operation is authorized under this general permit and the commissioner subsequently issues an individual permit for the same activity, then on the date any such individual permit is issued by the commissioner, the authorization issued under this general permit shall automatically expire.

Section 4. Registration Requirements

(a) Who Must File a Registration

(1) Any person who or municipality which initiates, creates, originates or maintains a discharge of the following wastewaters (as defined in this general permit) to groundwater or a surface water:

- Non-contact cooling water
- Geothermal heat pump water
- Water treatment wastewater
- Hydrostatic pressure testing of natural gas and/or petroleum tanks and/or pipelines wastewater
- Potable water system draining of tanks and pipelines
- Fire suppression system testing wastewater
- Hydrant flushing wastewater
- Boiler blowdown wastewater (to groundwater only).

shall use Registration Table 4.1 of this general permit to determine if:

A) a registration form which meets the requirements of Section 4 of this general permit is required, and

B) the applicable fee must be filed with the commissioner.

If the source or activity generating the discharge for which a registration is submitted under this general permit is owned by one person or municipality (the owner) but is leased or in some other way the legal responsibility of another person

or municipality (the operator), it is the operator's responsibility to submit the registration required by this general permit and maintain compliance with the terms and conditions of this general permit.

(b) Renewal Registration Timeline

(1) Facilities with existing authorization under the following general permits, which expire on March 29, 2017, that wish to seek authorization under this general permit, must file a registration for authorization within 90 days of the effective date of this general permit:

- General Permit for the Discharge of Non-contact Cooling Water;
- General Permit for the Discharge of Hydrostatic Pressure Testing Wastewaters;
- General Permit for the Discharge of Water Treatment Wastewater.

For enforcement purposes, failure to submit a registration within 90 days of the effective date of this general permit will be considered to be discharging without a permit.

Table 4.1—Registration and Fee Requirements

Discharge Category	Discharge Location	Maximum Daily Flow (gpd)	Registration Only	Registration with Approval	Fee	Registration Exemptions	Monitoring Exemptions
Noncontact Cooling Water	Surface Water	All Flows	Yes	No	\$625	See Section 4(b)(2)(A)(i) & (ii)	See Section 5(c)(2)(A)
	Groundwater	<5000 ≥5000	No Yes	No No	\$625		
Water Treatment Wastewater	Surface Water	All Flows	Yes	No	\$625	See Section 4(b)(2)(B)	See Section 5(c)(2)(B)
	Groundwater	<500 ≥500	No Yes	No No ¹	\$625		
Hydrostatic Pressure Testing of Natural Gas/Petroleum Tanks and/or Pipelines Wastewater	Surface Water	All Flows	No	Yes	\$1250	None	None
	Groundwater		No	Yes		None	None
Potable Water System Draining of Tanks/Pipelines Wastewater	Surface Water	All Flows	No	No	NA	NA	None
	Groundwater		No	No			
Fire Suppression System Testing Wastewater	Groundwater	<5000	No	No	\$625	See Section 4(b)(2)(C)(ii)	See Section 5(c)(2)(C)(i)
		≥5000	Yes	No			
	Surface Water	<5000	No	No			
		≥5000	Yes	No			
Hydrant Flushing Wastewater	Surface or Groundwater	All Flows	No	No	NA	See Section 4(b)(2)(C)(i)	See Section 5(c)(2)(C)(ii)
Boiler Blowdown to Ground (to which no chemicals are added)	Groundwater	<5,000	No	No	NA	NA	None
Geothermal Heat Pump Water, Residential Building	Groundwater	<50,000	No	No	NA	See Section 4(b)(2)(A)(ii)	See Section 5(c)(2)(A)
		≥50,000— <500,000	Yes	No	\$625		
Geothermal Heat Pump Water, Residential Institution or Nonresidential Building	Surface or Groundwater	<500,000	Yes	No	\$625	See Section 4(b)(2)(A)(iii)	

¹New discharges of water treatment wastewater generated from the backwash of filtration, reverse osmosis, oxidation/filtration, or ion exchange units greater than 500 gallons per day and directed to the groundwaters of the state will require approval.

2) Exemptions from Registration (All discharges exempted from registration must still follow conditions described in Section 5 of this general permit)

(A) Non-contact Cooling Water and Geothermal Heat Pump Exemptions from Registration

- (i) A discharge of non-contact cooling water *condensate* or geothermal heat pump water *condensate* of 500 gallons per day or less is exempt from registration, monitoring, and fee requirements provided such discharge meets the requirements of Section 3 and conditions of Section 5 of this general permit;
- (ii) A geothermal heat pump discharge from a residential building, derived solely from a once-through heat exchange system which does not receive chemical additions of any kind and discharges to the groundwater is exempt from registration, provided the requirements of Section 3 and conditions of Section 5 of this general permit are met;
- (iii) A discharge of non-contact cooling and geothermal heat pump water to the ground water which is less than 5,000 gallons per day.

(B) Water Treatment Wastewater Exemptions from Registration

- (i) A discharge consisting only of raw water;
- (ii) Any discharge from pump leakage, sampling taps, water treatment wastewater laboratory wastewater, or on-line analytical instrumentation which are not discharged directly to a surface water body;
- (iii) Any discharge generated from the backwash of filtration, reverse osmosis, oxidation/filtration, ion exchange units that treat water from a source of potable water provided the discharge is less than 500 gallons per day and directed to the groundwaters of the state.
- (iv) Any discharge of water supply system tank and pipeline draining wastewater (including hydrostatic tests) which meets conditions in section 5(a)(4) of this general permit.

(C) Other Wastewater Discharge Exemptions from Registration

- (i) A discharge of hydrant flushing wastewater which follows conditions listed at Section 5(a)(6) of this general permit.
- (ii) A discharge of fire suppression system testing wastewater which is less than 5,000 gallons per day.

(b) Scope of Registration

A registrant shall submit one registration form for all activities taking place at a single site for which the registrant seeks authorization under this general permit. For a Public Water System, water storage tanks and pipelines that are part of the distribution network can be included in the registration for the associated water treatment facility.

(c) Contents of Registration

(1) Fees

- (A) (i) For any discharge which requires registration only, a registration fee of \$625 for any person or \$312.50 for any municipality shall be submitted with a completed registration form.
 - (ii) For any discharge which requires an approval of registration, a registration fee of \$1250 for any person or \$625 for any municipality shall be submitted with a completed registration form.
 - (iii) A registration shall not be deemed complete and no discharge shall be authorized by this general permit unless the registration fee has been paid in full.
- (B) The registration fee shall be paid by check or money order payable to the **Department of Energy and Environmental Protection**.
- (C) The registration fee is non-refundable.

(2) Registration Form

A registration shall be filed on forms prescribed by the commissioner and shall include but not be limited to the following:

- (A) Legal name, address, and telephone number of the registrant. If the registrant is an entity transacting business in Connecticut and is required to register with the Connecticut Secretary of the State, provide the exact name as registered with the Connecticut Secretary of the State;
- (B) Legal name, address, and telephone number of the owner of the property on which the subject activity is to take place;

- (C) Legal name, address, and telephone number of the registrant's attorney or other representative, if applicable;
- (D) Legal name, address, and telephone number of any consultant(s) or engineer(s) retained by the registrant to prepare the registration or to design or construct the subject activity;
- (E) Location, address, and name of the site for which the registration is being submitted;
- (F) For potable water treatment facilities, a list of all water storage tanks associated with that facility;
- (G) Maximum daily total flow in gallons per day, the maximum instantaneous flow rate in gallons per minute for each discharge;
- (H) The method of flow measurement of each discharge (e.g. estimation, flow meter, etc.);
- (I) A description of the duration of each discharge (batch or continuous, hours per day);
- (J) An estimated date of when each discharge began or will begin;
- (K) A detailed description of the process or activity generating each discharge and the type(s) of wastewater to be discharged;
- (L) A list of the substances used or added to the wastewater, including but not limited to those substances for which effluent limits are specified in Section 5(a) of this general permit and those substances listed in Appendix B Table II, III and V or Appendix D of section 22a-430-4 of the Regulations of Connecticut State Agencies;
- (M) A description of any wastewater treatment processes, such as neutralization, filtration, or precipitation of solids or metals, etc. which the registrant utilizes or will utilize to achieve compliance with any of the effluent limits specified in Section 5(b) of this general permit;
- (N) For each outfall point:
 - (i) name of stream or surface water body receiving the discharge,
 - (ii) the Water Quality Classification of the receiving surface water

body, whether it is listed as impaired in the most recent Connecticut Integrated Water Quality Report pursuant to Clean Water Act section 303(d) and 305(b), and the cause of impairment,

- (iii) the latitude and longitude for each discharge point,
- (iv) if discharge is to the ground, the name of the nearest downgradient stream, wetland, or other water body and the distance to it;

(O) Monitoring Plan

For all discharges requiring monitoring in accordance with Section 5(c) of this general permit, a monitoring plan which specifies for each discharge the:

- i) monitoring location,
- ii) sample type,
- iii) parameters to be monitored,
- iv) frequency of monitoring,
- v) method of flow measurement,
- vi) record keeping and reporting requirements;

(P) For existing Water Treatment Wastewater and Non-Contact Cooling Water discharges to surface water, one screening analysis from the testing of a sample taken within 90 days of registration for pollutants specified by Table 5.3 of this general permit shall be submitted with the registration form.

- i) If additives containing nitrogen or phosphorus were used, the sample should also be tested for total Kjeldahl nitrogen, nitrates, and total phosphorus.
- ii) For noncontact cooling water discharges from a cooling tower or water treatment wastewaters from an outdoor lagoon, the sample should be tested for: 1) E-coli bacteria (for discharges to fresh water) or 2) enterococci and fecal coliform bacteria (for discharges to saline waters).

- (Q) Plans and specifications for the treatment system of any discharge generated from the backwash of filtration, reverse osmosis, oxidation/filtration, ion exchange units that treat water from a source of potable water provided the discharge is greater than 500 gallons per day and directed to the groundwaters of the state;
- (R) A written certification signed by a Qualified Professional which complies with Section 3(b)(12) of this general permit;
- (S) A written certification, signed by the registrant and any other individual or individuals responsible for preparing the registration, which complies with the requirements of Section 3(b)(13) of this general permit.

(3) Special Registration Requirements

(A) Non-contact Cooling Water

- (i) An indication of the source of the cooling water (groundwater, surface water, or public water supply);
- (ii) An indication of any known source of contamination;
- (iii) For discharges to non-tidal surface waters, the 7Q10 of the receiving stream;
- (iv) For tidal surface waters, available dilution at low tide as determined by the commissioner;
- (v) For existing discharges, a table summarizing the last two years of monitoring data including flow, temperature, and aquatic toxicity testing results including chemical parameters;
- (vi) For any discharge to surface water, a signed NetDMR Subscriber Agreement.

(B) Water Treatment Wastewater

- (i) For potable water treatment facilities, a list of all water storage tanks associated with that facility;
- (ii) an 8 ½" by 11" site map showing location of treatment lagoons and discharge point locations;

- (iii) For discharges to surface water, the 7Q10 of the receiving stream;
 - (iv) For each discharge, whether the discharge contains residual chlorine;
 - (v) For existing discharges, a table summarizing last 2 years of monitoring data – including flow, and aquatic toxicity testing results including chemical parameters;
 - (vi) Residuals Management Plan -- For water treatment facilities producing residuals, a Residuals Management Plan must be developed which addresses the following:
 - (a) The various types of residuals produced (e.g. clarification process waste or filter backwash waste) and their average solids content;
 - (b) For each residual type, a chemical analysis of its content;
 - (c) Standard operating procedures for residuals management and maintenance at the water treatment facility. At a minimum, a summary of the operation and maintenance plans for any lagoons, a description of where the solid material removed is to be placed, stored, and disposed of as well as the techniques used to prevent the removed solids from reentering the surface waters from any onsite storage;
 - (vii) For any discharge to surface water, a signed NetDMR Subscriber Agreement.
- (C) Hydrostatic Pressure Testing of Natural Gas and Petroleum Tanks and/or Pipelines Wastewater
- (i) the type of product in the tank or pipeline
 - (ii) the estimated ambient flow rate of the receiving stream
- (D) Fire Suppression System Testing Wastewater
- (i) the flow and duration of the discharge,
 - (ii) how many times per year the testing will occur,
 - (iii) the discharge location (to ground, catch basin, receiving stream, etc)

(d) Contents of a Modified Registration

A modified registration:

- (1) shall be submitted to correct inaccurate or misleading information previously submitted to the Department, in accordance with Section 6(g) of this general permit; or
- (2) shall be submitted prior to any significant facility modifications, as described below:
 - A) any increase in noncontact cooling water or water treatment wastewater to a surface water from what is currently registered; or
 - B) any process change that results in the discharge of a new pollutant
- (3) shall be filed on forms described in Section 4(c) of this general permit. For all registration section(s) remaining unchanged from the initial registration, a registrant may indicate "Information Unchanged" in the appropriate section(s) of the registration.
- (4) No fee is required to be submitted with a modified registration.

(e) Where to File a Registration or Modified Registration

A registration or modified registration shall be filed with the commissioner at the following address:

**Central Permit Processing Unit
Connecticut Department of Energy and Environmental Protection
79 Elm Street
Hartford, CT 06106-5127**

(f) Additional Information

The commissioner may require a registrant to submit additional information, which the commissioner reasonably deems necessary to evaluate the consistency of the subject activity with the requirements for authorization under this general permit.

(g) Action by Commissioner

- (1) The commissioner may reject without prejudice a registration or modified registration if it is determined that it does not satisfy the requirements of Section 4(c) or 4(d) of this general permit and more than thirty days (30) have elapsed since the commissioner requested that the registrant submit additional information. Any registration refiled after such a rejection shall be accompanied by the fee specified in Section

4(a) of this general permit.

- (2) The commissioner shall disapprove a registration or modified registration if it is found that the subject activity is:
 - (A) Inconsistent with the requirements for authorization under Section 3 of this general permit; OR
 - (B) Unable to comply with the effluent limits in Section 5(b) of this general permit; OR
 - (C) The imposition of conditions in this general permit cannot ensure that the discharge, either singly or in combination with other discharges, would not cause or contribute to pollution, would not endanger human health or the environment or would not be consistent with the Connecticut Water Quality Standards; OR
 - (D) For any other reason provided by law.
- (3) Disapproval of a registration or modified registration under this subsection shall constitute notice to the registrant that the subject activity may not lawfully be conducted or maintained without the issuance of an individual permit.
- (4) The commissioner may approve a registration or modified registration with reasonable conditions. If the commissioner approves a registration with conditions, the permittee shall be bound by such conditions as if they were a part of this general permit.
- (5) Rejection, disapproval, or approval of a registration or modified registration shall be in writing

Section 5. Conditions of This General Permit

The permittee must meet the requirements for authorization set forth in Section 3 of this general permit and assure that the discharge authorized by this general permit is conducted in accordance with the following conditions:

(a) Operating Conditions

(1) General Operating Conditions Applying to Surface Water or Groundwater Discharges

(A) Appearance

The discharge shall not contain or cause in the receiving waterbody:

- (i) a visible oil sheen
- (ii) floating solids
- (iii) visible discoloration
- (iv) foaming in the receiving water body.

(B) Temperature

- (i) The temperature of the discharge shall not increase the temperature of the receiving water above 85°F for freshwaters and 83°F for marine waters, nor shall the discharge raise the temperature of the receiving stream more than 4°F. at any time, except for marine waters during the months of July, August, and September, during which time the discharge shall not raise the temperature of the receiving waters by more than 1.5°F.
- (ii) No discharge shall have a temperature greater than 100°F at the point of discharge to the surface water body.

- (C) The wastewater shall not be discharged to any open floor drain, floor trench, sump or drainage system which is designed or constructed to receive or which may receive chemical spillage or wastewaters not authorized by this general permit.

(2) Conditions for Non-contact Cooling and Geothermal Heat Pump Water Discharges to Surface Water or Groundwater

- (A) Any discharge to surface water shall have a minimum dilution available in the receiving stream at seven day, ten year low flow of at least ten to one.
- (B) Wetlands, natural lakes and ponds cannot be used as a source nor a discharge point for residential geothermal heat pump water.
- (C) All non-contact cooling water and geothermal heat pump water shall be totally enclosed within piping during its use except when recirculating cooling towers are utilized.
- (D) A discharge of non-contact cooling water or geothermal heat pump water to groundwater shall be derived solely from once-through heat exchange systems or condensate which does not receive chemical additions of any kind and which uses on-site groundwater, public water supply or surface water as source water.
- (E) A discharge of non-contact cooling and geothermal heat pump water from vapor degreasers, dry cleaning machines, or other equipment used to cool chlorinated solvent vapors, and a discharge of non-contact cooling and

geothermal heat pump water which contains chemicals added to the source water after it enters the site, e.g., cooling tower blowdown, shall be discharged only to a POTW or to a surface water which does not have an existing or future classification of A, AA, or SA in the Connecticut Water Quality Standards at the time the registration is submitted. Cooling tower blowdown which does not receive chemical additions of any kind may be discharged to surface waters with any classification in the Connecticut Water Quality Standards requirements provided such discharge meets the requirements of Section 3 and subsection 5(a) of this general permit.

- (F) For any discharge to a surface water, chemical additives used on site in non-contact cooling and geothermal heat pump water shall not contain any of the substances listed in Appendix B, Tables II, III, and V, and Appendix D of section 22a-430-4 of the Regulations of Connecticut State Agencies. Water treatment chemicals or additives containing chromium, copper, lead, zinc, or tributyl tin shall not be added to the discharge nor shall sacrificial metals be used within the cooling water or geothermal heat pump system.
- (G) Groundwater contaminated as a result of industrial or commercial activity including but not limited to those substances listed in Appendix B, Tables II, III, and V, and Appendix D of section 22a-430-4 of the Regulations of Connecticut State Agencies shall not be used as a source water unless a completed registration has been filed with the commissioner and the registrant has received, an approval in writing from the commissioner.
- (H) Discharges of non-contact cooling and geothermal heat pump water shall not lower the salinity of the receiving water by more than five percent.
- (I) The maximum daily discharge limit for non-contact cooling and geothermal heat pump water is 500,000 gallons per day.

(3) Conditions for Water Treatment Wastewater Discharges to Surface Water or Groundwater

- (A) For any lagoon used to treat or convey water treatment wastewater that is constructed after the effective date of this general permit, the minimum elevation of the top of the berm of the lagoon shall be constructed and maintained above the 100 year base flood elevation.
- (B) The following types of water treatment wastewater shall *not* be discharged to a surface water:
 - (i) Facility and equipment cleaning rinsewaters containing detergents or surfactants;

- (ii) Water treatment laboratory wastewaters;
 - (iii) Start-up wastewaters for water treatment wastewater facilities or equipment containing detergents or surfactants.
- (C) The following types of water treatment wastewater discharges shall not be authorized by this General Permit:
- (i) Regeneration and backwash wastewaters to surface water from sodium chloride ion exchange units.
 - (ii) Activated carbon backwash and regeneration wastewaters for filters which treat for volatile organic compounds, except that initial start-up backwash conducted for the removal of loose carbon fines may be discharged to any surface water or groundwater provided such initial start-up backwash has been pretreated to remove solids.
 - (iii) Other water treatment wastewater 's containing chemical additives which contain any substances identified in Appendix B, Tables II, and V, and Appendix D of Section 22a-430-4 of the Regulations of Connecticut State Agencies, except those water treatment wastewater discharges which do not exceed: (a) all effluent limits specified in Sections 5(b) of this general permit; or (b) if no such limit is specified in said Sections 5(b), the most restrictive aquatic life or human health criteria listed in Appendix D of the Water Quality Standards.
- (D) The following types of water treatment wastewater shall be discharged to the surface water or ground water *only* after treatment for solids removal to meet the 20.0 mg/l effluent limit specified in Section 5(b) for total suspended solids:
- (i) Clarifier tank sludge blowdown;
 - (ii) Green sand filter ion exchange regeneration wastewaters
 - (iii) Filter media backwash and regeneration wastewaters.
- (E) Clarifier tank sludge blowdown shall not be discharged to subsurface disposal systems.
- (F) For discharges to a subsurface disposal system, the maximum daily flow of all discharges of water treatment wastewater generated by a registrant on one site shall not exceed 50,000 gallons per day.
- (G) The Maximum daily discharge limit for water treatment wastewater to surface water is 2,000,000 gallons per day.

- (H) Stormwater runoff shall not be discharged to any lagoons and beds which are used for the treatment of water treatment wastewater, but may be discharged to lagoons or beds used to treat stormwater run-off and which are also used to hold emergency overflows of water treatment wastewater.
- (I) For all discharges of water treatment wastewater to groundwater which require submission of a registration, the following minimum separating distances shall be maintained between any point of a disposal system and any potable water supply well which is not downgradient and also not associated with this discharge:
- (i) for potable water supply wells yielding less than 10 gallons per minute - 75 feet;
 - (ii) for potable water supply wells yielding 10 or more gallons per minute but less than 50 gallons per minute - 150 feet;
 - (iii) for potable water supply wells yielding more than 50 gallons per minute - 200 feet.
- (J) For discharges of water treatment wastewater to the ground water which require submission of a registration, the minimum separating distance between any point of the disposal system and any *downgradient* potable water supply well shall be 1,000 feet, unless a ground water monitoring program has been approved in writing by the Commissioner. The minimum separating distance between a disposal system and downgradient potable water supply well, if a ground water monitoring program has been approved in writing by the Commissioner, shall be 200 feet. For the purpose of this subparagraph, downgradient refers to groundwater gradient if it is known, or if no data indicating groundwater gradient is known, topographic gradient.
- (K) For discharges of water treatment wastewater to the ground water, there shall be a minimum depth of 2 feet between the bottom of any lagoon or bed used to treat or convey water treatment wastewater and any underlying bedrock surface, and at least 2 feet separation between the bottom of any such lagoon or bed and the seasonal high ground water table. This distance can be reduced to 1 foot for treatment of low flow water treatment wastewater unless the source water requires treatment for pathogen removal, in which case such separation distance shall be a minimum of twenty-four (24) inches;
- (L) Discharges of water treatment wastewater to the ground water shall not interfere with another subsurface disposal system (permitted in accordance with section 19a-36 or 22a-430 of the General Statutes and the regulations adopted thereunder) and its treatment of wastewater, or render a drainfield or subsurface disposal system incapable of infiltration, or cause such drainfield or subsurface system to exceed its hydraulic capacity. Permittees treating low flow water treatment

wastewater should consult the local Director of Health if soil or groundwater conditions provide uncertainty about placement of the water treatment wastewater dispersal structure.

- (M) For discharges of low flow water treatment wastewater, the water treatment wastewater dispersal structure shall have a storage volume that is at least one and a half (1.5) times the volume of the maximum daily discharge of low flow water treatment wastewater;
- (N) For discharges of low flow water treatment wastewater, the minimum horizontal separating distances between the water treatment wastewater dispersal structure and other items shall be as prescribed in Table 5.1 below.

Table 5.1 – Minimum Horizontal Separating Distances⁽¹⁾ Item

Public or private water supply well with required withdrawal rate of:	Separating Distance (feet)
< 10 gal. per minute	75
10 to 50 gal. per minute	150
> 50 gal. per minute	200
Watercourse	50
Public Water Supply Reservoir	100
Property Line	15
Subsurface Sewage Disposal System	10(2)

(1)The local Director of Health may allow a separating distance reduction to a private water supply well, watercourse, or property line in the event site limitations or lot size prevents compliance with Table 5.1. Such separating distance reductions shall only be granted on existing developed properties and not for new construction. The separating distance to a private water supply well shall not be reduced to less than 25 feet and shall be consistent with any Connecticut Department of Public Health requirements.

- (O) Discharges from potable water tank or pipeline draining to *surface waters* associated with hydrostatic testing, repair or maintenance, inspection, or new pipeline installation shall comply with the following:
 - (i) Potable water storage tanks should be drained or pumped to the water supply system to the extent possible before draining. Residual solids in the tank bottom should be removed or controlled to minimize turbidity in the discharge.
 - (ii) The discharge shall be provided with controls such as check dams or temporary basins to prevent erosion, sedimentation, visible discoloration and foaming of the receiving water body and to dissipate energy prior to discharge.
 - (iii) All discharges with residual chlorine levels greater than 0.05 mg/l must use a dechlorination technique to lower the residual chlorine to less than 0.05

mg/l prior to discharging into any watercourse based upon a field analyzed grab sample.

(iv) A record shall be kept of the discharge location, estimated flow, and Total Residual Chlorine level.

(P) Discharges from potable water tank or pipeline draining to *ground waters* associated with hydrostatic testing, repair or maintenance, inspection, or new pipeline installation shall comply with the following:

(i) Potable water storage tanks should be drained or pumped to the water supply system to the extent possible before draining. Residual solids in the tank bottom should be removed or controlled to minimize turbidity in the discharge.

(ii) Erosion and sediment controls shall be utilized when necessary, and structural practices must be implemented to divert flows away from exposed soils, retain the discharges where they will infiltrate the ground, and otherwise limit the discharge of pollutants from the site into surface waters. All steps must be taken to avoid discharging when ground surface is frozen.

(iii) A record shall be kept of the discharge location, estimated flow, and Total Residual Chlorine level.

(Q) No discharge of water treatment wastewater to surface water shall contain substances in excess of any maximum contaminant level, as defined in this general permit, for any substance which can reasonably be expected to be present within the raw water supply.

(R) Aluminum Effluent Compliance Plan

Registrants who cannot meet aluminum effluent limits in Table 5.3 must prepare a compliance plan detailing steps necessary to meet the aluminum effluent limits within three years of the effective date of this general permit. The compliance plan shall include, at a minimum:

(i) the specific procedures used to minimize the discharge of aluminum to surface waters (e.g. baffles, filters) while maintaining compliance with the Safe Drinking Water Act (SDWA) requirements, and

(ii) the procedures and schedules for removal of accumulated sludge from the filter backwash sedimentation basin or sludge treatment facility in order to maintain effective removal of solids prior to the wastewater discharge to

surface waters and,

- (iii) an examination of alternate procedures or improvements to current procedures that would increase the efficiency of solids or aluminum removal prior to the wastewater discharge to surface waters,
- (iv) an evaluation of using coagulants which do not contain aluminum.

4) Conditions for Petroleum and Natural Gas Hydrostatic Pressure Testing Wastewater Discharges to Surface Water or Groundwater

- (A) Prior to any hydrostatic pressure testing, each permittee shall remove to the maximum extent all solid and liquid substances including scale, soil and any residues from materials previously contained in the tank or pipeline using the following practices at a minimum:
 - (i) for all pipelines: cleaning with either compressed air, high pressure water spray, or both;
 - (ii) for natural gas pipelines: cleaning with compressed air and with cleaning pigs designed for such pipelines;
 - (iii) for all used tanks: cleaning with compressed air, high pressure water spray, or both.
- (B) Wastewaters generated from the cleaning procedures described above are not authorized by this general permit and authorization under a permit pursuant to section 22a-430 or section 22a-430b of the General Statutes must be obtained prior to discharge. Alternatively cleaning wastewater may be collected for off-site transport and disposal by a licensed waste transporter.
- (C) No chemicals are to be added to any water used for hydrostatic pressure testing after it enters the site, or to the tanks or pipelines which are being tested.
- (D) The Maximum daily discharge limit for hydrostatic pressure testing of natural gas and petroleum tanks and pipelines wastewater to surface water is 500,000 gallons per day.
- (E) Hydrostatic Pressure Testing Wastewater Discharges to *Surface Water*
 - (i) All hydrostatic pressure testing wastewater discharging directly to a surface water body shall be provided with controls such as check dams or temporary basins to prevent erosion or any visible discoloration and foaming of the receiving water body and to dissipate energy prior to discharge.

- (ii) For hydrostatic tests which discharge to flowing surface waters, the maximum instantaneous flow shall not exceed 10% of the surface water's ambient flow rate. For all other surface waters, the total volume of discharge of hydrostatic pressure testing wastewater to surface waters shall not exceed 1% of the total volume of the receiving water body.
- (iii) All discharges with residual chlorine levels greater than 0.05 mg/l must use a dechlorination technique to lower the residual chlorine to less than 0.05 mg/l prior to discharging into any watercourse.
- (iv) If the source of hydrostatic pressure testing water is a surface water body the intake point of the pipe used to draw the test water from the surface water shall be located at a depth which minimizes the entrainment of sediments.

(F) Hydrostatic Pressure Testing Wastewater Discharges to ***Ground Surface***

- (i) Erosion and sediment controls shall be utilized when necessary, and structural practices must be implemented to divert flows away from exposed soils, retain the discharges where they will infiltrate the ground, and otherwise limit the discharge of pollutants from the site into surface waters. All steps must be taken to avoid discharging when ground surface is frozen.
- (ii) Discharges shall be seventy five feet from any private well and two hundred feet from any public well.

5) Conditions for Fire Suppression System Testing Wastewater Discharges to Surface Water or Groundwater

(A) Fire Suppression System Testing Wastewater Discharges to ***Surface Water***

- (i) Fire suppression system testing wastewaters should be discharged to a surface water only if a discharge to a municipal sanitary sewer or to the groundwater or ground surface is not available as an option.
- (ii) All fire suppression system testing wastewater discharging directly to a surface water body shall be provided with controls as necessary to remove accumulated solids and to prevent erosion, sedimentation, visible discoloration and foaming of the receiving water body and to dissipate energy prior to discharge.

Filtration of the first flush is required to control discoloration and remove accumulated solids.

(iii) All discharges with residual chlorine levels greater than 0.05 mg/l must use a dechlorination technique to lower the residual chlorine to less than 0.05 mg/l prior to discharging into any watercourse.

(B) Fire Suppression System Testing Wastewater Discharges to ***Groundwater***

(i) Erosion and sediment controls shall be utilized when necessary, and structural practices must be implemented to divert flows away from exposed soils, retain the discharges where they will infiltrate the ground on the discharger's property, and otherwise limit the discharge of pollutants from the site into surface waters. All steps must be taken to avoid discharging when ground surface is frozen.

(ii) Discharges shall be seventy five feet from any private well and two hundred feet from any public well.

6) Conditions for Hydrant Flushing Wastewater Discharges

(A) Registrants shall direct the discharge to the ground or vegetated swales when possible to prevent direct discharges to storm drains.

(B) Registrant shall minimize the potential for sedimentation and scouring by using proper erosion and sediment controls when necessary.

(C) If discharging to a storm drain, registrant shall maximize travel time in order to dissipate chlorine.

(D) If discharging to a storm drain, registrant shall remove debris from the curb and gutter before initiating flushing.

7) Conditions for Boiler Blowdown to Groundwater

(A) Only boiler blowdown discharges from boiler water to which chemicals are not added are authorized by this general permit.

(B) All boiler blowdown discharges must be to the subsurface and not the ground surface or surface waters.

- (C) All discharges of minor boiler blowdown wastewaters are discharged to groundwaters which, on the effective date of this general permit or the date the discharge is initiated, whichever is later, have an existing or future Water Quality Classification of GA or GB in the Connecticut Water Quality Standards adopted pursuant to section 22a-426 of the Connecticut General Statutes.
- (D) Boil-out and boiler acid wastewaters are not covered by this permit. The discharge of these wastewaters must be permitted separately under section 22a-430 or 22a-430b of the General Statutes, or these wastewaters must be collected by a waste transporter holding a valid license issued by the Commissioner for that purpose.

(b) Effluent Limits for Discharges to Surface Water

For discharges to a surface water, the discharge shall comply with the following maximum daily limits in Tables 5.2 and 5.3:

Table 5.2

Parameter	Maximum Daily Limit
pH¹	6-9 standard units
Total Petroleum Hydrocarbons	5.0 mg/l
Manganese, total	3.0 mg/l
Iron, total	3.0 mg/l
Suspended Solids, total	20 mg/l
Suspended Solids total, (limit for Hydrostatic Pressure Testing only)	45 mg/l
Whole Effluent Toxicity (WET) survival in 100% effluent	≥90%

¹ A variance is allowed if the discharge is into the same water body from which the water is drawn, and the pH of the source water as naturally occurs is less than 6.0 or greater than 9.0 standard units, in which case the pH of the discharge shall be no more than 0.5 standard units greater or less than the source water.

Table 5.3—Effluent Limits for Discharges to Surface Water

Parameter	Instream Waste Concentration ⁽¹⁾ (mg/l)					
	Reservoir, lake	<1.0%	1-5%	6-10%	>10% - 15%	Intermittent Discharge ²
Total Aluminum	1.5	1.5	1.41	0.722	0.474	1.5
Total Manganese	3.0	3.0	3.0	2.45	1.6	3.0
Total Copper	0.105	0.48	0.095	0.049	0.032	0.12
Total Lead	0.048	0.111	0.020	0.010	0.006	0.15
Total Zinc	0.292	2.0	0.642	0.326	0.215	0.32
Total residual Chlorine	0.085	0.90	0.180	0.091	0.060	0.05

¹ The Instream Waste Concentration shall be calculated by dividing the maximum gallon/hr flow of the discharge by the sum of the maximum gallon/hr flow of the discharge and the seven day ten year low flow of the receiving stream and multiplying the result by 100. Prior to completing the registration for this general permit, the CT DEEP must be contacted to confirm the 7Q10 of the receiving waters and the resulting Instream Waste Concentration. For existing facilities which are renewing general permit registrations see Appendices B or C for 7Q10's.

²For discharges that occur at a maximum of once every three months.

c) Monitoring Requirements for Discharges to Surface Waters

1) Chemical Parameters, Aquatic Toxicity, and Frequency of Monitoring

Discharges to surface water under this general permit shall be monitored for:

- **chemical parameters** specified in Table 5.4 of this general permit at the frequency specified in Table 5.5 of this general permit.
- **aquatic toxicity** at the frequency specified in Table 5.6 of this general permit.

Table 5.4 Surface Water Discharge Monitoring Parameters

<u>Parameter to be Monitored</u>	<u>Discharge Type</u>			
	Noncontact Cooling Water	Water Treatment Wastewater^{1,2}	Hydrostatic Pressure Testing of Natural Gas and Petroleum	Fire Suppression^{4,5}
Flow	x	x	x	x
pH	x	x	x	x
Temperature	x			
Copper, total	x	x		x
Lead, total	x	x		x
Zinc, total	x	x		x
Total Petroleum Hydrocarbons (TPH)			x ³	
Total Residual Chlorine	x	x	x	x
Toxicity	x	x		
Iron, total		x	x	x
Manganese, total		x		
Aluminum, total		x ⁶		
Total Suspended Solids		x	x	x
Total Dissolved Solids		x		
Appearance	x	x	x	x

¹ Water from potable water supply tank draining shall monitor first 10% and last 10% of total discharge for pH, total suspended solids, total copper, total zinc, total iron, and total residual chlorine. Submission of results through NetDMR is not required.

² Water from potable water supply pipeline draining shall only monitor for total residual chlorine. Submission of results through NetDMR is not required.

³Pipelines or tanks previously holding petroleum products must test for TPH.

⁴For fire suppression testing flows less than 5,000 gpd, monitor for flow, pH, and TRC annually. Submission of results through NetDMR is not required.

⁵For fire suppression testing flows greater than 5,000 gpd, annually monitor (twice per year for flows ≥ 50,000 gpd) for iron, copper, zinc, lead, TSS (as depicted in Table 5.3) and each test event for flow, pH, TRC, and appearance.

⁶Aluminum monitoring shall be required only for wastewater associated

with alum treatment.

Table 5.5 Surface Water Discharge Parameter Monitoring Frequency

Permitted Maximum Daily Flow (gallons per day)	Noncontact Cooling Water		Water Treatment Wastewater		Hydrostatic Pressure Testing of Natural Gas and Oil		Fire Suppression Testing	
	Frequency	Sample Type	Frequency	Sample Type	Frequency	Sample Type	Frequency	Sample Type
Flow < 5,000	Annually	Grab	Annually	Grab	1 st 10% & last 10% per event	Grab	Annual	Grab
5,000 ≤ Flow < 50,000	Quarterly ¹	Grab	Quarterly	Grab	1 st 10% & last 10% per event	Grab	Annual	Grab
Flow ≥ 50,000	Monthly ¹	Grab	Monthly	Grab ²	1 st 10% & last 10% per event	Grab	Twice per year	Grab

¹ Temperature monitoring weekly at discharge point and monthly for in-waterbody monitoring as described in Section 5(c)(10) for noncontact cooling water.

² For discharges lasting longer than four hours, two grab samples shall be taken at least four hours apart with the maximum value reported.

Table 5.6—Surface Water Discharge Aquatic Toxicity Monitoring Frequency^{1,2}

Permitted Maximum Daily Flow (gallons per day)	Noncontact Cooling Water	Water Treatment Wastewater	Hydrostatic Pressure Testing of Natural Gas and Oil	Fire Suppression Testing
Flow < 5,000	Annually	None	None	None
5,000 ≤ Flow < 50,000	Twice per year	Twice per year	None	None
Flow ≥ 50,000	Quarterly	Quarterly	None	None

¹ The sample analyzed for aquatic toxicity determination shall also be used to satisfy effluent monitoring requirements for the chemical parameters.

² If there is no discharge in the specified sampling month, the permittee shall report “NO FLOW” on the monitoring report for that month and then sample on the next month that discharge occurs.

2) Exemptions From Monitoring Requirements

(A) Non-contact Cooling Water

Provided such discharge meets the requirements of Section 3 and the conditions of Section 5(a) and effluent limits of Section 5(b) of this general permit, the following discharges are exempt from monitoring requirements:

- i) Non-contact cooling water condensate and geothermal heat pump water *condensate* discharge, excluding air compressor condensate
- ii) Geothermal heat pump bleed off waters to groundwater

(B) Water Treatment Wastewater

Provided such discharge meets the requirements of Section 3 and the conditions of Section 5(a) of this general permit, the following discharges are exempt from monitoring requirements:

- i) Overflows of water treatment wastewater provided that they are ceased as soon as practicable after obtaining knowledge of the overflow condition and best management practices such as high level alarms, solenoid shut-off valves or containment have been implemented to minimize these overflows.
- ii) A discharge consisting only of raw water
- iii) Any discharge from pump leakage, sampling taps, water treatment laboratory wastewater, or on-line analytical instrumentation which are not discharged directly to a surface water body.

(C) Other Wastewater

Provided such discharge meets the requirements of Section 3 and the conditions of Section 5(a) of this general permit, the following discharges are exempt from monitoring requirements:

- i) Fire suppression testing to groundwater
- ii) Hydrant Flushing using Best Management Practices

(3) Monitoring Location

Samples taken in compliance with the monitoring requirements specified in this general permit shall be taken at a location that provides a representative sample of the effluent just prior to discharge to the receiving water or, if the effluent is commingled with another discharge, prior to such comingling. All samples taken shall be representative of the discharge during standard operating conditions.

(4) Monitoring of Discharges to Impaired Waters

Permittees of discharges to impaired waters, as defined in this general permit, must conduct monitoring of discharges in addition to the requirements of Section 5(c) of this general permit.

(A) Discharges to Impaired Waters Without an Established Total Maximum Daily Load

- i) For discharges to an impaired water without a Total Maximum Daily Load, the permittee must monitor annually for any indicator pollutants identified as contributing to the impairment if informed in writing by the Department (and for which a standard analytical method exists). No monitoring is required when a waterbody's biological communities are impaired but no pollutant, including indicator or surrogate pollutants, is identified as an indicator of the impairment, or when a waterbody's impairment is related to hydrologic modifications, impaired hydrology, or temperature.
- ii) This monitoring requirement does not apply after the first year of monitoring if the indicator pollutant is not detected above natural background levels, as determined by the commissioner, in the discharge.

(B) Discharges to Impaired Waters With an Established Total Maximum Daily Load

- i) For discharges to impaired waters for which there is an established Total Maximum Daily Load, the permittee is required to monitor for any indicator pollutant identified in the Total Maximum Daily Load if informed in writing by the Department (following the Department's examination of the applicable Total Maximum Daily Load and/or Waste Load Allocation (WLA)). The Department's notice will include specifications on which indicator pollutant to monitor, limit of detection, and the required monitoring frequency during the first year of permit coverage.
- ii) Following the first year of monitoring:
 - a) If the indicator pollutant is not detected in any of the first year samples, the permittee may discontinue further sampling, unless

the Total Maximum Daily Load has specific instructions to the contrary, in which case the permittee must follow those instructions.

b) If the permittee detects the presence of the indicator pollutant in the discharge for any of the samples collected in the first year, the permittee must continue monitoring annually throughout the term of this general permit, unless the Total Maximum Daily Load specifies more frequent monitoring, in which case the Total Maximum Daily Load requirements must be followed.

(5) Monitoring Plan

All registrants must follow the monitoring plan required by Section 4(c)(2)(O) of this general permit which outlines, for each discharge, the:

- (A) monitoring location;
- (B) sample type;
- (C) parameters to be monitored;
- (D) frequency of monitoring;
- (E) method of flow measurement; and
- (F) record keeping and reporting requirements

(6) Sample Type

- (A) Samples collected for purposes of monitoring aquatic toxicity and chemical parameters shall be grab samples.
- (B) Any permittee who applies copper sulfate to reservoirs shall sample any surface water discharge authorized by this general permit when the discharge would be expected to have its highest concentration of copper.

(7) Test Methods-- In accordance with 40 C.F.R. § 122.44(i)(1)(iv), the Permittee shall use sufficiently sensitive test methods approved in accordance with 40 CFR 136 which are capable of achieving a limit of detection below the level established as an effluent limit in Section 5(b) of this general permit, or as specified in Table 5.7 of this general permit.

Table 5.7 Sampling Method Minimum Levels of Detection

Pollutant Parameter	Minimum Analytical Quantification Level
Copper, Total Recoverable	5.0 µg/l
Lead, Total Recoverable	5.0 µg/l
Zinc, Total Recoverable	5.0 µg/l
Total Residual Chlorine	50.0 µg/l
Aluminum, Total Recoverable	50 µg/l (ICP method)
pH	+/- 0.10 Standard Unit

(8) Flow Monitoring

(A) For flows less than 5,000 gallons per day, the permittee may use reasonable methods to monitor or estimate flow such as the use of dedicated incoming water meter, a bucket and a stop watch, maximum pump capacity, pump rate, or other generally acceptable engineering practices.

(B) For discharges greater than 5,000 gallons per day to a surface water body, the permittee shall use either:

- i) a flow meter capable of measuring, visually indicating and recording instantaneous and total daily flow; or
- ii) a method certified by a Qualified Professional Engineer to measure and record total daily flow during all periods of discharge.

(C) Total Daily Flow shall be monitored at the same frequency as chemical monitoring events.

(9) Temperature Monitoring for Non-contact Cooling Water Discharges to Surface Water

(A) The permittee is required to monitor the discharge temperature weekly and the receiving waterbody temperature monthly. Waterbody monitoring shall be done at a one foot depth on a day when the facility is operating and on a day when the discharge temperature is monitored and reported. If stream is less than two feet deep, monitor mid depth.

(B) During each monitoring event the permittee shall measure the temperature of the receiving water body at one point upstream of the discharge and at

another point a sufficient distance downstream of the discharge outfall to allow for initial mixing. The background and downstream in-waterbody temperature sample locations shall be described in the monitoring plan submitted with the registration.

- (C) If the discharge is into a lake, a pond, or tidally influenced waters, one background temperature measurement shall be taken from an area not expected to be impacted by the discharge. The background and downstream in-waterbody temperature sample locations shall be described in the monitoring plan submitted with the registration.
- (D) If the registrant can demonstrate that waterbody temperature monitoring is not feasible due to site constraints (e.g difficult or unsafe access), the commissioner may waive the requirement. Weekly effluent temperature monitoring will still be required.

(10) Aquatic Toxicity

Samples collected for determination of aquatic toxicity shall be tested using the NOAEL protocol specified in section 22a-430-3(j)(7)(A) of the Regulations of Connecticut State Agencies.

The following additional specifications apply:

- (A) Toxicity tests shall be initiated within 24 hours of sample collection.
 - (i) Grab samples shall be chilled immediately following sample collection.
 - (ii) Samples used for Aquatic toxicity shall not be dechlorinated, filtered or modified in any way prior to testing, except for samples which require salinity adjustment. For salinities of between 5 ppt and 15 ppt, the effluent may be salinity adjusted to 15 ppt using artificial sea salts.
- (B) For salinity less than 5 ppt toxicity tests shall employ neonatal (less than 24 hours old) *Daphnia pulex* and juvenile (1-14 days old, with no greater than a 24 hour range in age) *Pimephales promelas* as test organisms. For salinity greater than or equal to 5 ppt toxicity tests shall utilize neonatal (1-5 days old with no more than 24-hours range in age) *Mysidopsis bahia* and juvenile (9-14 days old, with no greater than a 24 hour range in age) *Menidia beryllina* as test organisms.
- (C) Toxicity tests shall be 48 hours in duration.

- (D) All samples collected for determination of aquatic toxicity shall be analyzed for chemical parameters listed in Table 5.3 using the methods specified in 40 CFR 136 which are capable of achieving the limits of detection specified in Table 5.6. In addition, all samples for toxicity must be measured for temperature, pH, total residual chlorine, alkalinity, hardness and specific conductance upon arrival at the toxicity testing laboratory.
- (E) If any toxicity test indicates that either of the conditions listed below has occurred, another sample of the discharge shall be collected and tested as described above within 30 days of the previous test.
- (i) The survival of the test organisms was less than ninety (90) percent in the *average* of the test chambers containing undiluted effluent (permit limit exceeded).
 - (ii) The survival of test organisms was less than ninety (90) percent in *each replicate* control test chamber or test conditions were not achieved as specified in section 22a-430-3(j)(7)(A) of the Regulations of Connecticut State Agencies, such as maintenance of appropriate environmental controls (invalid test).
- (F) Following the violation of any aquatic toxicity limit for two consecutive tests or three tests in any 12 month period, the permittee shall conduct a Toxicity Identification/Reduction Evaluation (see Methods for Aquatic Toxicity Identification Evaluations, Publication No. EPA/600/6-91/003) and submit a schedule for return to compliance.
- (G) All toxicity tests and supporting chemistry must be reported to the Department via NetDMR and by electronic mail using a format supplied by the commissioner.

(d) Effluent Limits for Discharges to Groundwater

For discharges directly to the ground surface or a discharge to a subsurface disposal system, the discharge shall comply with the following effluent limits:

Table 5.8 Effluent Limits for Discharges to Groundwater

Parameter	Limit (mg/l)	Parameter	Limit¹ (mg/l)
Flow	500,000 gpd	Aluminum	1.5
pH	6-9 s.u.	Iron	3.0
TPH	5	Manganese	3.0

¹If a permittee is unable to meet the effluent limits for aluminum, iron, and/or manganese, the permittee may propose a groundwater monitoring program to demonstrate compliance with the CT Water Quality Standards.

e) Monitoring Requirements for Discharges to Ground Waters

1) Chemical Parameters and Frequency of Monitoring

Discharges to the ground (either to ground surface or by subsurface disposal) under this general permit shall be monitored for:

- **chemical parameters** specified in Table 5.9 of this general permit at the frequency specified in Table 5.10 of this general permit.
- **flow** at the frequency specified in Table 5.10 of this general permit.

Table 5.9 Ground Water Discharge Monitoring Parameters

<u>Parameter</u>	Discharge Type		
	Noncontact Cooling Water	Water Treatment Wastewater²	Natural Gas and Petroleum Hydrostatic Pressure Testing
Flow	X	X	X
pH	X	X	X
Temp	X		
Copper	X	X	
Lead	X	X	
Zinc	X	X	
Total Petroleum Hydrocarbons			X ¹
Total Residual Chlorine		X	
Iron		X	X
Manganese		X	
Aluminum		X	
TSS			X

¹Only Pipelines or tanks previously holding petroleum products must test for Total Petroleum Hydrocarbons. All other tanks and pipelines do not.

²Samples shall be prepared by settling of solids and filtration through a 0.45 uM filter prior to analysis.

Table 5.10 Ground Water Discharge Monitoring Frequency¹

Permitted Maximum Daily Flow (gallons per day)	Noncontact Cooling Water		Water Treatment Wastewater		Natural Gas and Petroleum Hydrostatic Pressure Testing	
	Frequency	Sample Type	Frequency	Sample Type	Frequency	Sample Type
Flow <5,000	Annual	Grab	Annually	Grab	1 st 10% & last 10% per event	Grab
5,000 ≤ Flow <50,000	Semi-Annually (January & July)	Grab	Quarterly	Grab	1 st 10% & last 10% per event	Grab
Flow ≥ 50,000	Quarterly	Grab	Monthly	Grab ²	1 st 10% & last 10% per event	Grab

¹ No monitoring is required for fire suppression testing discharges to the ground.

² For discharges lasting longer than four hours, two grab samples shall be taken at least four hours apart.

(2) Monitoring Location

Wastewater samples shall be composed solely of non-contact cooling and geothermal heat pump water, water treatment wastewater, or hydrostatic pressure testing wastewater prior to combination with wastewaters of any other type. All samples taken shall be representative of the discharge during standard operating conditions.

(3) Sample Type

Samples collected for purposes of monitoring chemical parameters for discharges to groundwater shall be grab samples. Samples collected shall be prepared by settling of solids and filtration through a 0.45 µm filter prior to analysis.

(f) Reporting Requirements

- (1) For any discharge to surface water (excluding potable water supply tank and pipeline draining and fire suppression testing), results of monitoring shall be reported to the Bureau of Materials Management and Compliance Assurance on a Discharge Monitoring Report (DMR) at the frequency specified in Table 5.5 of this general permit. Should a discharge not occur during a sampling month, a DMR must still be submitted indicating “NO DISCHARGE”.

(A) Timeline for Commencement of Electronic Reporting using NetDMR

Beginning the first full calendar month following the month after the effective date of the authorization to discharge, the operator shall begin reporting monitoring data electronically using NetDMR, unless, in accordance with Section (f)(1)(C) of this general permit, the operator is able to demonstrate a reasonable basis, such as technical or administrative infeasibility, that precludes the use of NetDMR for submitting DMRs.

(B) DMR Due Date

DMRs shall be submitted electronically to the Department no later than the last day of the month following the month in which samples are taken.

(C) Submittal of NetDMR Opt-Out Requests

If the Registrant is able to demonstrate a reasonable basis, such as technical or administrative infeasibility, that precludes the use of NetDMR for electronically submitting DMRs and reports, the commissioner may approve the submission of DMRs and other required reports in hard copy form (“opt-out request”). Opt-out requests must be submitted in writing to the Department for written approval with a registrant’s registration. This demonstration shall be valid for twelve (12) months from the date of the Department’s approval and shall thereupon expire. At such time, DMRs and reports shall be submitted electronically to the Department using NetDMR unless the Registrant submits a renewed opt-out request and such request is approved by the Department.

(2) For any discharges lasting less than 30 days, all analytical results and other information required under this general permit shall be kept on site and not submitted to the commissioner.

(3) If the permittee monitors any discharge more frequently than required by the permit using test procedures approved under 40 CFR 136 or specified in the permit, the results shall be included in the DMR.

(4) All Aquatic Toxicity Monitoring Reports must be submitted via netDMR as an attachment to the monthly DMR.

(g) Record Keeping Requirements

- (1) For each category of discharge, excluding those exempt from registration and monitoring under this general permit, the permittee shall maintain for the parameters specified in Table 5-3 of this general permit at the monitoring frequency specified per Table 5-4 of this general permit a record containing at least the following information: total daily flow, a description of the process or activity which generated it, sample analytical results and chain of custody forms.
- (2) All analytical results shall be retained on-site or at the permittee's principal place of business in Connecticut for at least five years from the date such result or data was generated or received by the permittee. These results shall be made available to the commissioner immediately upon request.

(h) Recording and Reporting Violations

- (1) The permittee shall:
 - (A) within two hours of becoming aware of the circumstances (and at the start of the next business day if he or she becomes aware of the circumstances outside normal business hours) of any violation of:
 - i. any maximum daily limitation for a discharge to surface waters, or
 - ii. any violation of any maximum daily limitation greater than two times the permitted level for discharges to groundwaternotify the Water Permitting and Enforcement Division of the Bureau of Materials Management and Compliance Assurance (860-424-3025 during business hours 8:30 a.m. – 4:30 p.m., 860-424-3338 after business hours)
 - (B) within five days of becoming aware of the circumstances of any violation of:
 - i. any maximum daily limitation for a discharge to surface waters, or
 - ii. any violation of any maximum daily limitation greater than two times the permitted level for discharges to groundwatersubmit a written report that contains the following information
 - (i) the condition(s) or effluent limit(s) violated;
 - (ii) the analytical results and information demonstrating such violation(s);
 - (iii) the cause of the violation(s);

- (iv) period of noncompliance including exact dates and times;
 - (v) if the noncompliance has not been corrected, the anticipated time it is expected to continue, and, upon correction, the date and time of correction;
 - (vi) steps taken and planned to reduce, eliminate and prevent a recurrence of the noncompliance, and the dates such steps are executed; and
 - (vii) the name and title of the person recording the information and the date and time of such recording.
- (2) In addition to the requirements described in section 22a-430-3(j)(11)(D) of the Regulations of Connecticut State Agencies, any other actual or anticipated noncompliance with effluent limits or other terms and conditions of this general permit shall be recorded within twenty-four hours of becoming aware of such circumstances in a log which contains at least the following information:
- (A) the condition(s) or effluent limit(s) violated;
 - (B) the analytical results and information demonstrating such violation(s);
 - (C) the cause of the violation(s) or noncompliance;
 - (D) period of noncompliance including exact dates and times;
 - (E) if the noncompliance has not been corrected, the anticipated time it is expected to continue, and, upon correction, the date and time of correction;
 - (F) steps taken and planned to reduce, eliminate and prevent a recurrence of the noncompliance, and the dates such steps are executed; and
 - (G) the name and title of the person recording the information and the date and time of such recording.
- (3) The permittee shall submit a report to the commissioner prepared by a Professional Engineer licensed to practice in Connecticut if analytical results, monitoring data or other information indicates any of the following:
- (A) the exceedance of any effluent limit by more than two hundred percent;
 - (B) three or more violations of any effluent limit from a single sample;

- (C) three successive sampling events each of which show a violation(s) of any effluent limits;
- (D) the occurrence of four or more violations of any effluent limit during any calendar year;
- (E) the violation of the pH limit by more than one standard unit.

Such report shall contain at least the information required to be recorded under Section 5(h)(2) of this general permit and must be submitted within 20 days of becoming aware of the non-compliance which triggered the report. Such certified report shall be sent to the commissioner at the following address:

**Water Permitting and Enforcement Division
Bureau of Materials Management and Compliance Assurance
Connecticut Department of Energy and Environmental Protection
79 Elm Street
Hartford, CT 06106-5127**

- (4) Within 60 days after the deadline for submitting the report specified in Section 5(h)(3) of this general permit, the permittee shall submit to the commissioner (to the same address provided in Section 5(h)(3) of this general permit) the following certification signed by a Professional Engineer licensed to practice in Connecticut:

“I certify that in my professional judgment, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining information pursuant to Section 5(h)(3) of the Comprehensive General Permit for Discharges to Surface and Ground Waters that all discharge(s) which are maintained on the site referenced herein, and which are covered under the general permit comply with all conditions of said general permit, including but not limited to all effluent limits in Section 5(b) of such general permit, and proper operation and maintenance of any systems installed to treat such discharge(s) will insure that all effluent limits and other conditions in such general permit are met, or if there is no treatment system for such discharge(s), that the discharge(s) will meet all effluent limits and conditions of such general permit without treatment. This certification is based in part on my review of analyses of a minimum of three effluent samples collected, preserved, handled and analyzed in accordance with 40 CFR 136, which samples were representative of the discharge during standard operating conditions, were taken in the previous year, at least one week apart, and were of the type(s) specified in Section 5 of said general permit, and

were analyzed for the parameters specified in Section 5 of said general permit. I understand that a false statement made in this report, including all attachments thereto, or in this certification may, pursuant to section 22a-6 of the General Statutes, be punishable as a criminal offense under section 53a-157b of the General Statutes, and may also be punishable under section 22a-438 of the General Statutes and any other applicable law.”

(i) ***Regulations of Connecticut State Agencies Incorporated into this General Permit***

Unless specific conditions, terms or limitations within this general permit are more restrictive, the permittee shall comply with the following Regulations of Connecticut State Agencies which are hereby incorporated into this general permit, as if fully set forth herein:

(1) Section 22a-430-3:

Subsection (b) — General-subparagraph (1)(D) and subdivisions (2), (3), (4) and (5)

Subsection (c) - Inspection and Entry

Subsection (d) - Effect of a Permit — subdivisions (1) and (4)

Subsection (e) - Duty to Comply

Subsection (f) - Proper Operation and Maintenance

Subsection (g) - Sludge Disposal

Subsection (h) - Duty to Mitigate

Subsection (i) - Facility Modifications, Notification — subdivisions (1) and (4)

Subsection (j) - Monitoring, Records and Reporting Requirements — subdivisions (1), (6), (7), (8), (9) and (11) (except subparagraphs (9)(A)(2), and (9)(C))

Subsection (k) - Bypass

Subsection (m) - Effluent Limit Violations

Subsection (n) - Enforcement

Subsection (o) - Resource Conservation

Subsection (p) - Spill Prevention and Control

Subsection (q) - Instrumentation, Alarms, Flow Recorders

Subsection (r) - Equalization

(2) Section 22a-430-4:

Subsection (p) - Revocation, Denial, Modification

Subsection (q) - Variances

Subsection (t) - Prohibitions

Section 6. General Conditions

(a) *Reliance on Registration*

When evaluating a registration, the commissioner relies on information provided by the registrant. If such information proves to be false or incomplete, the authorization issued under this general permit may be suspended or revoked in accordance with law, and the commissioner may take any other legal action provided by law.

(b) *Duty to Correct and Report Violations*

Upon learning of a violation of a condition of this general permit, a permittee shall immediately take all reasonable action to determine the cause of such violation, correct such violation and mitigate its results, prevent further such violation, and comply with Section 5(h) of this general permit. Such report shall be certified in accordance with Section 6(d) of this general permit.

(c) *Duty to Provide Information*

If the commissioner requests any information pertinent to the authorized activity or to determine compliance with this general permit, or with the permittee's approval of registration, the permittee shall provide such information in writing within thirty (30) days of such request. Such information shall be certified in accordance with Section 6(d) of this general permit.

(d) *Certification of Documents*

Any document, including but not limited to any notice, which is submitted to the commissioner under this general permit shall be signed by, as applicable, the registrant or the permittee in accordance with section 22a-430-3(b)(2) of the Regulations of Connecticut State Agencies, and by the individual or individuals responsible for actually preparing such document, each of whom shall certify in writing as follows:

“I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement made in the submitted information may be punishable as

a criminal offense, in accordance with section 22a-6 of the General Statutes, pursuant to section 53a-157b of the General Statutes, and in accordance with any other applicable statute.”

(e) *Date of Filing*

For purposes of this general permit, the date of filing with the commissioner of any document is the date such document is received by the commissioner. The word “day” as used in this general permit means the calendar day; if any date specified in the general permit falls on a Saturday, Sunday, or legal holiday, such deadline shall be the next business day thereafter.

(f) *False Statements*

Any false statement in any information submitted pursuant to this general permit may be punishable as a criminal offense, in accordance with section 22a-6 of the General Statutes, pursuant to section 53a-157b of the General Statutes, and in accordance with any other applicable statute.

(g) *Correction of Inaccuracies*

Within fifteen (15) days after the date a permittee becomes aware of a change in any of the information submitted pursuant to this general permit, becomes aware that any such information is inaccurate or misleading, or that any relevant information has been omitted, such permittee shall correct the inaccurate or misleading information or supply the omitted information in writing to the commissioner. Such information shall be certified in accordance with Section 6(d) of this general permit. The provisions of this subsection shall apply both while a request for approval of registration is pending and after the commissioner has approved such request.

(h) *Transfer of Authorization*

A registration or an approval of registration under this general permit is transferable only in accordance with the provisions of section 22a-60 of the General Statutes. Any person or municipality proposing to transfer an approval of registration shall submit a license transfer form to the commissioner to transfer the previous permit authorization to a new registrant. The new registrant is not authorized by this general permit until the transfer is approved by the commissioner.

(i) ***Other Applicable Law***

Nothing in this general permit shall relieve the permittee of the obligation to comply with any other applicable federal, state and local law, including but not limited to the obligation to obtain any other authorizations required by such law.

(j) ***Other Rights***

This general permit is subject to and does not derogate any present or future rights or powers of the State of Connecticut and conveys no rights in real or personal property nor any exclusive privileges, and is subject to all public and private rights and to any federal, state, and local laws pertinent to the property or activity affected by such general permit. In conducting any activity authorized hereunder, the permittee may not cause pollution, impairment, or destruction of the air, water, or other natural resources of this state. The issuance of this general permit shall not create any presumption that this general permit should or will be renewed.

Section 7. Commissioner's Powers

(a) ***Abatement of Violations***

The commissioner may take any action provided by law to abate a violation of this general permit, including the commencement of proceedings to collect penalties for such violation. The commissioner may, by summary proceedings or otherwise and for any reason provided by law, including violation of this general permit, revoke a permittee's authorization hereunder in accordance with sections 22a-3a-2 through 22a-3a-6, inclusive, of the Regulations of Connecticut State Agencies. Nothing herein shall be construed to affect any remedy available to the commissioner by law.

(b) ***General Permit Revocation, Suspension, or Modification***

The commissioner may, for any reason provided by law, by summary proceedings or otherwise, revoke or suspend this general permit or modify it to establish any appropriate conditions, schedules of compliance, or other provisions which may be necessary to protect human health or the environment.

(c) ***Filing of an Individual Permit Application***

If the commissioner notifies a permittee in writing that such permittee must obtain an individual permit to continue lawfully conducting the activity authorized by this general permit, the permittee may continue conducting such activity only if the permittee files an application for an individual permit within sixty (60) days of receiving the commissioner's notice. While such application is pending before the commissioner, the permittee shall comply with the terms and conditions of this general permit and the subject approval of registration. Nothing herein shall affect the commissioner's power to revoke a permittee's authorization under this general permit at any time.

Issued: [DATE]

Michael Sullivan
Deputy Commissioner

Appendix A—General Definitions

The definitions of terms used in this general permit shall be the same as the definitions contained in section 22a-423 of the General Statutes and section 22a-430-3(a) of the Regulations of Connecticut State Agencies. As used in this general permit, the following definitions shall apply:

“Air compressor blowdown” means condensed moisture from compressed air that is drained from the interior of electrical or mechanical air compressor equipment.

“Air compressor condensate” means wastewater which accumulates on the exterior of electrical or mechanical air compressor equipment due to condensation.

“Approval of Registration” means an approval of registration issued under Section 4 of this general permit.

“Authorized activity” means any activity authorized by this general permit.

“Authorized discharge” means a discharge authorized under this general permit.

“Best management practice” (BMP) means a practice, procedure, structure or facility designed to prevent or minimize environmental damage, or to maintain or enhance environmental quality. BMPs include without limit treatment requirements, operating procedures, practices to control spillage or leaks, sludge or waste disposal, or providing for drainage from raw material storage.

“Boiler blowdown wastewater” means wastewater resulting from periodic or continuous bleed off or draining of bottom, bulk or surface water from a boiler during boiler operation for the purpose of eliminating excess solids from the boiler water, and shall include steam condensate from boiler operations but does not include boil-out or boiler acid cleaning wastewater.

“Boil-out” means wastewater and waste alkaline cleaning solution generated from hot alkaline cleaning to remove oil and grease, protective coatings or soil, performed as maintenance on a boiler or performed on a new boiler prior to operation.

“Coastal waters” means those waters of Long Island Sound and its harbors, embayments, tidal rivers, streams and creeks which contain a salinity concentration of at least five hundred parts per million under low flow conditions.

“CFR” means the Code of Federal Regulations.

“Chemical liquids” means chemical liquids as defined by section 22a-448 of the General Statutes.

“Commissioner” means commissioner as defined by section 22a-423 of the General Statutes

“*Condensate*” means the product of the physical process in which water is removed from a vapor or vapor mixture (e.g., pipe sweat).

“*Contact cooling and heating wastewater*” means water which, for the purpose of heat transfer, comes directly into contact with a product or manufacturing process.

“*Day*” means the calendar day; if any date specified in the general permit falls on a Saturday, Sunday, or legal holiday, such deadline shall be the next business day thereafter.

“*Department*” means the Department of Energy and Environmental Protection.

“*Facility*” means any facility at which an authorized discharge originates.

“*Filter to waste*” means the initial volume of filtrate produced following backwash of a filter, or following the initial construction, rebuilding or maintenance of a filter.

“*Filtration*” means a physical, chemical or biological process that reduces concentrations of contaminants in water by passing it through filter media.

“*Fire suppression system testing wastewater*” means wastewater generated by the testing or maintenance of a fire sprinkler or suppression system that meets all effluent limits specified in subsection 5(a) of this general permit and does not include foams or other fire-fighting additives.

“*Geothermal heat pump*” means a central heating and/or cooling system that transfers heat to or from groundwater.

“*Hydrostatic pressure testing wastewater*” means waters used to test the structural integrity of new tanks and pipelines, and tanks and pipelines which have been used to hold or transfer drinking water, sewage, petroleum, or natural gas.

“*Hydrant flushing wastewater*” means waters generated from the flushing of hydrants in order to remove accumulated rust and sediment from the pipes and water mains, assess water flow and pressure and to examine conditions of the water distribution system to determine any needed improvements.

“*Impaired water(s)*” means those surface waters of the state designated by the Commissioner as impaired pursuant to Section 303(d) of the federal Clean Water Act and as identified in the most recent State of Connecticut Integrated Water Quality Report.

“*In responsible charge*” means: (A) when used in the Qualified Professional Engineer definition in this general permit, professional experience for which the Commissioner determines that a professional’s primary duties consistently involve a high level of responsibility and decision making in the planning and designing of engineered systems for the treatment of sanitary, industrial, and commercial wastewaters. The Commissioner shall consider the following in determining whether a professional’s experience qualifies as responsible charge experience:

- (1) the level of independent decision-making exercised;
- (2) the number of individuals and the disciplines of the other professionals that the professional supervised or coordinated;
- (3) the extent to which a professional's responsibilities consistently involved the review of work performed by other professionals involved in the planning and designing of engineered systems or the planning and compliance certification of pre-engineered systems for the treatment of sanitary, industrial, and commercial wastewaters;
- (4) the extent to which a professional's responsibilities consistently involved the planning and designing of engineered systems or the planning and compliance certification of pre-engineered systems for the treatment of industrial and commercial wastewaters and whether such responsibilities were an integral and substantial component of the professional's position;
- (5) the nature of a professional's employer's primary business interests and the relation of those interests to planning and designing of engineered systems or the planning and compliance certification of pre-engineered systems for the treatment of industrial and commercial wastewaters;
- (6) the extent to which a professional has engaged in the evaluation and selection of scientific or technical methodologies for planning and designing of engineered systems or the planning and compliance certification of pre-engineered systems for the treatment of industrial and commercial wastewaters;
- (7) the extent to which a professional drew technical conclusions, made recommendations, and issued opinions based on the results of planning and designing of engineered systems or the planning and compliance certification of pre-engineered systems for the treatment of industrial and commercial wastewaters; and
- (8) any other factor that the Commissioner deems relevant.

"Individual permit" a permit issued to a named permittee under section 22a-430 of the General Statutes.

"Licensed Waste Transporter" means a commercial waste transporter licensed by the commissioner under the authority of section 22a-454(a) of the General Statutes.

"Local building official" means the municipal officer or other designated authority charged with the administration and enforcement of the State Building Code in accordance with section 29-253 of the General Statutes or a duly authorized representative.

"Low Flow Water Treatment Wastewater" or "LFWTW" for the purpose of this general permit means:

- 1) a maximum of 500 gallons per day of wastewater generated by a point of entry water treatment device for the treatment of well water used to supply potable water to a residential building or institution or a non-residential building and
- 2) where the treated water is not purchased by another party and
- 3) does not include discharges from treatment system components for the removal of radionuclides and
- 4) the discharge does not fall under the jurisdiction of the CT Department of Public Health.

“Maximum Contaminant Level” or “MCL” means the maximum permissible level of a contaminant in water that is delivered to any consumer of a private water supply system or public water system as determined by sections 19-13-B101 and 19-13-B102 of the Regulations of Connecticut State Agencies.

“Maximum daily flow” means the greatest volume of wastewater that is discharged during an operating day.

“Maximum Instantaneous Flow” means the maximum flow at any time as measured in gallons per minute.

“Municipality” means a municipality as defined by section 22a-423 of the General Statutes.

“Non-contact cooling and geothermal heat pump water” means wastewater which has been used for cooling purposes, or generated from cooling processes, including but not limited to condensate from cooling systems, or for heating purposes and which does not come into direct contact with a product or process, except for water treatment chemicals in recirculation systems. This definition does not include air compressor condensate or blowdown from boiler equipment.

“Nonresidential building” means any commercial, industrial, institutional, public or other building not occupied as a dwelling, including transient hotels and motels.

“Oil or petroleum” means oil or petroleum as defined in section 22a-448 of the General Statutes.

“Permittee” unless the context indicates otherwise, means any person who or municipality which initiates, creates, originates or maintains a discharge of wastewater under the authority of this general permit..

“Person” means person as defined by section 22a-2(c) of the General Statutes.

“Potable water system maintenance or sampling wastewaters” means 1) potable water storage tank or water line draining for maintenance or hydrostatic testing purposes or 2) raw or treated water from process sampling points, on-line process analytical instrumentation; or 3) raw or treated water from equipment leakage and bleed-off.

“POTW” means a publicly owned treatment works, also known as a sewage treatment plant, as that term is defined by section 22a-430-3(a) of the General Statutes.

“*POTW authority*” means the chairperson, or duly authorized representative, of the Water Pollution Control Authority which owns or operates a Publicly Owned Treatment Works (POTW).

“*Professional Engineer*” or “*P.E.*” means a person with a currently effective license issued in accordance with Chapter 391 of the Connecticut General Statutes.

“*Publicly Owned Treatment Works (POTW)*” means a system used for the collection, treatment and/or disposal of sewage from more than one lot as defined in section 22a-430-1 of the Regulations of Connecticut State Agencies which discharges to the waters of the state and which is owned by a municipality or the state.

“*Public water system*” means public water system as defined in section 19-13-B102(a) of the Regulations of Connecticut State Agencies.

“*Qualified Professional*” means a professional engineer who has, for a minimum of eight years, engaged in the planning and designing of engineered systems for the collection and treatment of sanitary, industrial and commercial wastewaters including, but not limited to, a minimum of four years in responsible charge of the planning and designing of such engineered systems.

“*RCSA*” means Regulations of Connecticut State Agencies.

“*Raw water*” means water withdrawn from a reservoir or well prior to any physical treatment of such water.

“*Registrant*” means a person who or municipality which files a registration pursuant to Section 4 of this general permit.

“*Registration*” means a registration form filed with the commissioner pursuant to Section 4 of this general permit.

“*Residential building*” means any house, apartment, condominium, trailer or mobile home, or other structure occupied by individuals permanently or temporarily as a dwelling place but not including residential institutions.

“*Residential institution*” means any institutional or commercial building occupied by individuals permanently or temporarily as a dwelling, including dormitories, boarding houses, hospitals, nursing homes, jails, and residential hotels or motels.

“*Seven day, ten year low flow*” or “*7Q10*” means the lowest seven consecutive-day mean stream flow with a recurrence interval of ten years.

“*Site*” means geographically contiguous land or water on which an authorized activity takes place or on which an activity for which authorization is sought under this general permit is proposed to take place. Non-contiguous land or water owned by the same person and connected by a right-of-way which such person controls and to which the public does not have access shall be deemed the same site.

“Total Maximum Daily Load” or “TMDL” means the maximum capacity of a surface water to assimilate a pollutant as established by the commissioner, including pollutants contributed by point and non-point sources and a margin of safety.

“Unsewered area” means an area that does not have direct access to a POTW by means of a permanent sewer line.

“Watercourse” means watercourse as defined in section 22a-38 of the General Statutes.

“Water Pollution Control Authority” means water pollution control authority as referred to in Chapter 103, Title 7.

“Water Quality Standards” means water quality standards as adopted by the commissioner in accordance with section 22a-426 of the General Statutes.

“Water treatment facility” means any system, excluding a reservoir, used for potable or industrial process use, including but not limited to any industrial, municipal or private water treatment facility.

“Water treatment facility laboratory wastewaters” means raw water samples, finished (drinking) water samples, other water treatment laboratory wastewaters, and/or laboratory utensil cleaning wastewaters which have no chemical additives or reagents containing any of the substances listed in Appendix B, Tables II, III, and V, or Appendix D of Section 22a-430-4 of the Regulations of Connecticut State Agencies.

“Water treatment wastewaters or WTW” means wastewaters generated by a well or water treatment facility used to produce water supplies for potable or industrial process use, including but not limited to wastewaters from the following:

- clarifier tank sludge blowdown;
- clarifier tank supernatant;
- facility and equipment cleaning rinsewaters, excluding rinsewaters generated by the rinseout of containers used to store any chemical for which an effluent limit is not specified in Section 5(a) of this general permit;
- activated carbon and filter media backwash, including filter to waste, and regeneration wastewaters;
- raw or treated water from equipment leakage and bleed-off;
- mechanical and non-mechanical sludge dewatering wastewaters;
- infiltration bed and settling lagoon wastewaters;
- raw or treated water from process sampling points and on-line process analytical instrumentation;
- designed overflows from storage tanks and other WTW facilities resulting from emergency conditions and routine maintenance;
- potable water system maintenance or sampling wastewaters;

- start-up wastewaters for water treatment plants, facilities or equipment which commenced operation after the date of issuance of this general permit;
- ion exchange regeneration wastewaters;
- reverse osmosis reject water;
- laboratory wastewaters, and.
- Low flow water treatment wastewater

“Water Treatment Wastewater Dispersal Structure” means a structure, excavation or other facility designed to direct low flow water treatment wastewater to percolate into the underlying soil. Water treatment wastewater dispersal structures include but are not limited to stone filled excavations, leaching trenches, plastic leaching chambers, leaching galleries, leaching pits, etc.

APPENDIX B – NON CONTACT COOLING WATER – Estimated Receiving Water 7Q10

Permittee	Facility	Town	Permit No.	Receiving Water	7Q10 (cfs)
A.J.Tuck		Brookfield	GCW010003	Still River	13.10
Nutmeg Wire		Baltic	GCW010017	Shetucket River	50.30
Rogers Manufacturing		Rockfall	GCW010033	Coginchaug River	1.64
Bass Plating		Bloomfield	GCW010038	Mill Brook	1.30
IBM		Southbury	GCW010039	Pomperaug River	6.16
Greenwich Hospital		Greenwich	GCW010052	Long Island Sound	Tidal
Eastern CT State University		Windham	GCW010066	Willimantic River	27.40
Greens Farms Academy		Westport	GCW010072	Long Island Sound	Tidal
First Light Hydro Generating Company	Bantam Station	Litchfield	GCW010075	Bantam River	3.00
First Light Hydro Generating Company	Falls Village Station	Falls Village	GCW010076	Housatonic River	118.40
First Light Hydro Generating Company	Rocky River Station	New Milford	GCW010077	Housatonic River	177.90
First Light Hydro Generating Company	Shepaug Station	Southbury	GCW010078	Housatonic River	154.60
First Light Hydro Generating Company	Stevenson Station	Monroe	GCW010079	Housatonic River	171.40
Tadebe Treatment and Recycling Northeast, LLC		Meriden	GCW010081	Sodom Brook	0.76
South Central Regional Water Authority	Derby Pump Station	Derby	GCW010082	Two Mile Brook	0.28
Airgas Merchants		Bozrah	GCW010086	Yantic River	5.10
Polyone Designed Structures		Stamford	GCW010088	Stamford harbor	Tidal
MDC	Goodwin Hydroelectric Station	West Hartland	GCW010080	Farmington River	50.00

APPENDIX C - Water Treatment Wastewater Estimated Receiving Water 7Q10				
Permittee	Facility	Permit No.	Receiving Water	7Q10 (cfs)
Hazardville Water Company	Avery Filtration Plant	GWT000020	Unnamed tributary to the Scantic River	0.01
Aquarion Water Company	Housatonic wellfield	GWT000024	Housatonic River	171.4
Connecticut Water Company	Hunt Well	GWT000038	Scantic River	18.3
Windham Water Works	Willimantic Reservoir	GWT000058	Natchaug River	7.5
Town of Putnam	Peak Brook Road WTP	GWT000059	Little River	3.9
South Central Regional Water Authority	Lake Gaillard	GWT000066	headwaters of Burrs Brook	0.01
Connecticut Water Company	Clinton Well	GWT000090	Small Pond to Upper Millpond, Indian River basin	0.01